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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,369	07/17/2003	Michael Rys	MSFT-2743/141529.02	3172
41505	7590	03/28/2006	EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			WU, YICUN	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/623,369

Applicant(s)

RYS ET AL.

Examiner

Yicun Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### III. DETAILED ACTION

1. Claims 1-45 are presented for examination.

#### Information Disclosure Statement

2. The information disclosure statement filed 8/18/2003 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

No listing was provided.

Claim Rejections - 35 USC 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

4. Claims 1-45 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards the final result that is "useful, tangible and concrete (See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

According to the New Guidelines of October 26, 2005, which states that "A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557)... a specific machine to produce a useful, concrete, and tangible result (State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

Examiner requests Applicant to include in Applicant's claimed limitations (in all the claims) the following:

*Claim limitation describing --*

*1. What is the practical application?*

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2. *What is final result which Applicant considers concrete, useful and tangible?*

Because the "practical application, result, concrete, useful and tangible" limitations are not claimed in Applicant's claims, Examiner asserts that the above listed claims are nonstatutory.

**Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 14-19, 26-30, 37-42 and 44, are rejected under 35 U.S.C. 102(b) as being anticipated over Cheng et al. (U.S. Patent No. 6,366,934).

As to claims 1, 19, 30, 42 and 44, Cheng et al. discloses a method for generating a hierarchical data stream, comprising: receiving a query (i.e. querying. col. 3, lines 48-60) and col. 23, lines 1-35) including at least one valid database statement

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used to retrieve at least one rowset from a database (i.e. relational database system is disclosed for storing, querying and retrieving. col. 3, lines 48-60); processing the query to retrieve the at least one rowset from the database (i.e. relational database system is disclosed for storing, querying and retrieving. col. 3, lines 48-60); and transforming a rowset of the at least one rowset into a datatype instance (i.e. data types. col. 3, lines 48-60) of the hierarchical language (i.e. XML. col. 3, lines 48-60) of the hierarchical data stream (i.e. XML documents. col. 3, lines 48-60) by mapping at least one row element of the rowset (i.e. storing, searching, and retrieving XML documents internally, as DB20.RTM. Character Based Large Objects (CLOB) col. 3, lines 48-60) into at least one node of the hierarchical. data stream (i.e. XML documents. col. 3, lines 48-60).

As to claims 14, 26 and 37, Cheng et al. discloses a method wherein

the receiving includes receiving a query including a first valid database statement used to retrieve at least one rowset from the database (Cheng et al. col. 3, lines 48-60)

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nested within a second valid database statement used to retrieve at least one rowset from the database (Cheng et al. col. 23, lines 8-22),

whereby the first valid database statement has access to variables of the second valid database statement and the hierarchical data stream is a nested hierarchical data stream (Cheng et al. col. 23, lines 8-22).

As to claims 15, 27 and 38, Cheng et al. discloses a method wherein

the receiving includes receiving a query formatted according to structured query language (SQL) (Cheng et al. col. 23, lines 8-22).

As to claims 16, 28 and 39, Cheng et al. discloses a method wherein

the transforming includes transforming a rowset of the at least one rowset into an eXtensible markup language (XML) datatype instance of by mapping each row element of the rowset into an element of the XML data stream (Cheng et al. col. 23, lines 55 -col. 24, line 15).

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As to claims 17 and 29 Cheng et al. discloses a computer readable medium comprising computer executable instructions (fig. 1).

As to claim 18, Cheng et al. discloses an application programming interface comprising computer executable instructions (fig. 1).

As to claim 40, Cheng et al. discloses a server further comprising

a fourth object that transmits the hierarchical data stream to a destination (col. 20, lines 20-45).

As to claim 41, Cheng et al. discloses a server wherein the destination is specified by the query request received by the first object (col. 20, lines 20-45).

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at



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the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-3, 5-6, 8, 12, 20-25, 31-36, 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (U.S. Patent No. 6,366,934) in view of W3C ("Namespaces in XML" World Wide Web Consortium 1/14/1999).

As to claims 2, 20 and 31, Cheng et al. discloses a method, wherein the receiving includes

receiving a query including at least one valid database statement used to retrieve at least one rowset from a database (i.e. relational database system is disclosed for storing, querying and retrieving. col. 3, lines 48-60).

As to claims 3, 21 and 32, Cheng et al. discloses a method, wherein the receiving includes receiving a query (col. 3, lines 48-60) including at least one valid database statement used to retrieve at least one rowset from a database and a name option parameter (col. 23, lines 54- col. 24, lines 15),

Cheng et al. does not teach at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter.

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W3C teaches at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter (i.e. Multiple namespace prefixes. page 6, section 5.1).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. to include at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of W3C to include at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter with the motivation to improve modularity as taught by W3C (page 2, section 1).

As to claims 5, 22 and 33, Cheng et al. discloses a method wherein

the receiving includes receiving a query including at least one valid database statement used to retrieve at least one

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rowset from a database (Cheng et al. col. 3, lines 48-60 and col. 23, lines 54- col. 24, lines 15).

Cheng et al. does not teach a root option parameter whereby the mapping includes wrapping a plurality of row elements with a single element tag.

W3C teaches a root option parameter whereby the mapping includes wrapping a plurality of row elements with a single element tag (i.e. Multiple namespace prefixes can be declared as attributes of a single element. page 6, section 5.1).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. to include a root option parameter whereby the mapping includes wrapping a plurality of row elements with a single element tag.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of W3C to include a root option parameter whereby the mapping includes wrapping a plurality of row elements with a single element tag with the motivation to improve modularity as taught by W3C (page 2, section 1).

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As to claims 6, 23, 34, 43 and 45, Cheng et al. discloses a method wherein

the receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database (col. 3, lines 48-60).

Cheng et al. does not teach a map option parameter, whereby the transforming includes overwriting the row element mapping with a mapping that interprets names as paths.

W3C teaches a map option parameter, whereby the transforming includes overwriting (i.e. overridden. page 6, section 5.1) the row element mapping with a mapping that interprets names as paths. (page 6, section 5.1).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. to include a map option parameter, whereby the transforming includes overwriting the row element mapping with a mapping that interprets names as paths.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of W3C to include a map option parameter, whereby the transforming includes overwriting the row element mapping with a mapping that interprets names as

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paths with the motivation to improve modularity as taught by W3C (page 2, section 1).

As to claims 8, 24 and 35 Cheng et al. discloses a method wherein

the receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database (Cheng et al. col. 3, lines 48-60). Cheng et al. does not teach at least one namespace option parameter and the transforming includes associating a namespace to at least a portion of the hierarchical data stream. W3C teaches at least one namespace option parameter and the transforming includes associating a namespace to at least a portion of the hierarchical data stream (page 2, section 1 and page 2, section 2).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. to include at least one namespace option parameter and the transforming includes associating a namespace to at least a portion of the hierarchical data stream. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of W3C to include at least one

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namespace option parameter and the transforming includes associating a namespace to at least a portion of the hierarchical data stream with the motivation to improve modularity as taught by W3C (page 2, section 1).

As to claims 12, 25 and 36 Cheng et al. discloses a method wherein

the receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database (Cheng et al. col. 3, lines 48-60) Cheng et al. does not teach a null option parameter, whereby the transforming includes overwriting a default mapping of a NULL value during the transforming.

W3C teaches a null option parameter (i.e. empty. Page 6, section 5.2), whereby the transforming includes overwriting a default mapping of a NULL value (i.e. empty. Page 6, section 5.2) during the transforming (i.e. overridden. page 6, section 5.1).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. to include a null option parameter, whereby the transforming includes overwriting a default mapping of a NULL value during the transforming.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of W3C to include a null option parameter, whereby the transforming includes overwriting a default mapping of a NULL value during the transforming with the motivation to improve modularity as taught by W3C (page 2, section 1).

**Allowable subject Matter**

9. Claims 4, 7, 9-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent and if rewritten to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Nmaespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features

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in the claims): the transforming includes dropping a tag of the row element and any contained attributes, as claimed in claim 4.

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Nmaespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features in the claims): mapping columns in the order in which the columns appear in the rowset to attributes or subelements by interpreting the column names as a path, as claimed in claim 7.

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Nmaespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features in the claims): associating the namespace to the outermost node of the hierarchical data stream generated according to the transforming, as claimed in claim 9.

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Nmaespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features



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in the claims): associating the namespace to at least one top-level element of the hierarchical data stream generated according to the transforming, wherein if there is a plurality of top-level node, the namespace is added to each of the plurality of top-level node, as claimed in claim 10.

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Namespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features in the claims): associating the namespace to at least one top-level element of the hierarchical data stream generated according to the transforming, wherein if there is a plurality of top-level node, the namespace is added to each of the plurality of top-level node, as claimed in claim 10.

The prior art of record Cheng et al. (U.S. Patent No. 6,366,934) and W3C ("Namespaces in XML" World Wide Web Consortium 1/14/1999) does not disclose, teach or suggest the claimed limitations of (in combination with all other features in the claims):

an "absent" value of the null option parameter specifies default behavior whereby a null value results in the absence of

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a row element's containing attribute or subelement, whereby an "xsinil" value of the null option parameter adds a namespace declaration for a schema instance namespace and whereby an "empty" value of the null option parameter represents a null value with an empty string as the value of the attribute or subelement of a row element, as claimed in claim 13.

**Other Prior Art Made of Record**

11. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions.

Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov <http://www.uspto.gov/>), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.


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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yicun Wu whose telephone number is 571-272-4087. The examiner can normally be reached on 8:00 am to 4:30 pm, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Yicun Wu   
Patent Examiner  
Technology Center 2100

March 16, 2006